

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1. (Currently Amended) An apparatus for computing a preferred set of prices for a plurality of products, comprising:

an econometric engine for modeling sales as a function of price to create a sales model;

a financial model engine for modeling costs to create a cost model which includes an activity-based costing module configured to receive variable costs and fixed costs, wherein said cost model determines a total cost for each product in a given demand group in a given store for a given time period by computing a cost for each selected costing activity; and

an optimization engine coupled to the econometric engine and financial model engine to receive input from the econometric engine and financial model engine, wherein the optimization engine generates the preferred set of prices.

2. (Currently Amended) The apparatus, as recited in claim 1, wherein the optimization engine comprises:

a business rule tool, which stores a plurality of rule parameters; and

a price calculator connected to the business rule tool, the financial model engine, and the econometric engine, wherein the price calculator determines the preferred set of prices based on rule parameters, the sales model, and the cost model, further wherein said rule parameters constrain the preferred set of prices to fall within limits conforming to business strategy.

3. (Original) The apparatus, as recited in claim 2, further comprising a support tool connected to the optimization engine wherein the support tool receives the preferred set of prices

from the optimization engine and provides a user interface to a client, wherein the user interface provides the preferred set of prices to the client.

4. (Currently Amended) A method for determining a preferred set of prices for a plurality of products, comprising:

creating a sales model;

creating a cost model which includes activity-based costing, the activity-based costing including fixed costs and variable costs, wherein said cost model determines a total cost for each product in a given demand group in a given store for a given time period by computing a cost for each selected costing activity; and

generating the preferred set of prices for the plurality of products based on the sales model and cost model.

5. (Currently Amended) The method, as recited in claim 4, wherein the creating of the sales model comprises:

creating a plurality of demand groups, wherein each demand group is a set of at least one product and wherein at least one of the demand groups is a set of at least two products;

creating a sales model for each demand group for modeling sales of each demand group for a given time period in a given store; and

creating a market share model for each product in each demand group for modeling the fraction of each demand group sales made up by each product for said time period.

6. (Currently Amended) An apparatus for computing a preferred set of prices for a plurality of products comprising:

an econometric engine for modeling sales as a function of price to create a sales model based on Bayesian modeling, wherein data from at least two stores is combined to obtain a Bayesian estimation of the sales model;

a financial model engine for modeling costs to create a cost model which includes an activity-based costing module configured to receive variable costs and fixed costs; and

an optimization engine coupled to the econometric engine and financial model engine to receive input from the econometric engine and financial model engine, wherein the optimization engine generates the preferred set of prices.

7. (Original) The apparatus of claim 6 wherein the Bayesian model is a Bayesian Shrinkage model.
8. (Original) The apparatus of claim 7 where the Bayesian Shrinkage model is a multi-stage model.
9. (Original) The apparatus of claim 6 wherein the econometric engine provides demand coefficients to the optimization engine, the demand coefficients used for estimating demand given market conditions.
10. (Original) The apparatus of claim 8 wherein the market conditions include a price point.
11. (Original) The apparatus of claim 6 wherein the econometric engine divides the plurality of products into a plurality of demand groups, where at least one of said demand groups has at least two of said products in said at least one demand group.
12. (Original) The apparatus of claim 11 wherein the econometric engine generates a market share model for said products in said demand groups.
13. (Original) The apparatus of claim 12, wherein the econometric engine determines a sales model for each demand group so that the optimization engine is able to calculate demand for said products by multiplying the market share model for said products with the sales model for the demand group to which the product belongs.